

Introduction

Retro Canvas is an augmented reality art experience inspired by the classic 1990s drawing software *Kid Pix*. The project reimagines the playful, chaotic creativity of early digital art tools and brings it into a modern AR environment. Instead of drawing on a flat screen, users can create doodles, animations, and visual effects that exist within their physical space. By combining nostalgic Y2K aesthetics, sound effects, and AR interactions, Retro Canvas aims to create a digital playground that encourages creativity, experimentation, and stress-free expression in an otherwise high-pressure digital world.

Methodology

This project was developed using Unity and the AR Foundation to allow drawings and visual effects to interact with real-world surfaces. Plane detection and raycasting were used so that users could place and “paint” objects directly onto walls, floors, and other surfaces in their environment. Custom scripts controlled how objects appeared, animated, and responded to surfaces, such as paint splatters dripping down walls or objects growing outward from a plane. Sound effects inspired by Y2K and early computer games were added to reinforce the nostalgic tone and provide playful feedback for user actions. Iteration was an important part of the process, with multiple adjustments made to interaction design and visuals to maintain a balance between chaos and usability.

What Did You Learn

Through Retro Canvas, I gained experience working with AR design, especially how virtual objects can respond to physical space. I learned how to use plane detection and raycasting to create more immersive and intuitive interactions, as well as how sound design can significantly enhance user engagement. While I wasn’t able to fully implement it into the Meta Quest 3 headset, I was still able to fully utilize the subsystems of the AR Foundation. I also learned the importance of iteration when working with technology like AR. Small changes in interaction can greatly affect how frustrating or fun an experience can feel.

Audience Response

Audience feedback was positive and enthusiastic. Many users were drawn to the interface and its y2k inspired visuals and expressed nostalgia. I think this helped them emotionally connect to the project. Users enjoyed the playful nature of interacting with their environment and commented that the experience felt fun and wacky. Several people highlighted the sound effects as a strong element that enhanced the overall experience.